EDGE PRESENTS:
THE NORDIC
GAME INDUSTRY

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Sometimes you have to dig deep to find something you love. In games, that can be as simple as a character, a feature or a nuance – something subtle that captures your imagination, or feels somehow important to gaming as a whole. Nordic games are full of such things.

The Darkness, *Hitman*, *Eve Online* and *Just Cause* – to name but a few – aren't obvious hits. None launched a console, continued a franchise, adapted a movie, or seized upon a seismic cultural event. And yet all are success stories.

Seldom will you hear of a Nordic studio struggling with Unreal Engine 3, or duking it out with the owner of a precious intellectual property. That's not how these teams work. By and large, their technology – and by extension the looks of their games – is their own, built around the requirements of their own ideas. Founded on principles established by hobbyists during the '80s and '90s, their goal is always challenge – not for the player, necessarily, but for themselves. In a risk-averse industry, they don't ask 'Should it be done?' so much as 'How should it be done?'

Today's challenge, then: how to build awareness, capital and workforce without using sequels, licences and shortcuts? As business needs continue to wrestle with creative desires, games demand ever more in terms of manpower and skill. For a region rich in independent studios – and quite keen to stay that way – it's a complex, ongoing dilemma.
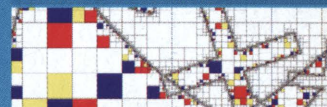
In this dedicated supplement we talk to the people facing up to these issues, consider what it means to work in the Nordic regions, examine the legacy of the infamous demoscene, and profile some of the key developers working in this or any other territory.
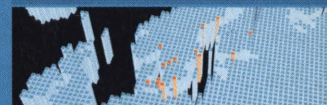
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ARCTIC CIRCLE

Faced with issues of identity, language, government support and a national reputation for expensive living, six of the region's top studios discuss the past, present and future of the Nordic development community

Despite the many cultures, languages and currencies that comprise the Nordic territories, developers in the region still face a common set of challenges. Games such as *Just Cause*, *The Darkness*, *Eve Online* and *Hitman* don't just need time and money, but also a creatively charged workforce with the energy to see them through. To understand this further, we brought together several of the region's biggest studios in DICE's stunning Stockholm HQ.

Participating were: **Peter Henriksson** (head of recruitment at DICE), **Christofer Sundberg** (creative director at Avalanche Studios), **Ivar Kristjansson** (CFO of CCP Games), **Mette Godsk** (HR manager at Deadline Games), **Mette Agerbæk** (HR manager at IO Interactive), **Robert Nyberg** (HR manager at Starbreeze Studios), **Stefan Ljungqvist** (art director at Avalanche Studios), and **Damien Simper** (lead animator at IO Interactive).

Why is the game-dev community so strong here? Is it closely connected to the demoscene?

Peter Henriksson: When you talk about the demo scene, it's really about competition, isn't it? It's about getting a good thing out of the door. So I guess that's a part of the Nordic spirit – it's both creative and focused on quality.

Stefan Ljungqvist: The most interesting developers are always the ones that create something amazing out of very little. That's something we have the demo scene to thank for. When we encounter difficult challenges, it's usually those guys who solve them. And the Nordic countries are early adopters of technology generally, so that technological edge has given us a great advantage. In fact, you could argue that it's one of the only reasons we're able to work with the platforms and technologies that we do now.

Robert Nyberg: Perhaps the scene isn't as important as it was, but it's still a great source for talent.

Does the community consist of mostly large developers, or are there many smaller outfits?

RN: If we're talking about web production, I'd say Scandinavia is really strong. We're a big part of the

international web community and we have a big range of mobile game developers. One interesting thing recently has been the incubator companies springing up around universities. I don't know how it is elsewhere, but in Sweden that's become a useful entry point.

Mette Agerbæk: I think we have about 80 different companies registered in Denmark – some of which are pretty small, of course, with just one or two employees. But still, that number really surprised me. We've also seen a lot of cooperation between the different universities, where you'll see programmers provided by one university, graphic artists by another, and animators by a third. We've had some really good candidates from these schools.

PH: That's really established itself in Sweden as well, with universities and other education establishments focusing their attentions on games. What's really interesting is that the higher-established universities look at this business as a new and growing industry, which will provide us with better graduates.

Do countries outside of the region appreciate the community's scale?

RN: Honestly, no. Maybe some publishers do, but not the media. And I'm not even sure if employees working in other countries realise it. Sometimes I get applications and the first question I ask – because it's

From top:
Christofer Sundberg
(Avalanche Studios)
Mette Agerbæk
(IO Interactive)
Stefan Ljungqvist
(Avalanche Studios)
Ivar Kristjansson
(CCP Games)

evident they're from Arizona or something – is whether they're willing to relocate to Sweden. And they immediately answer: "Sorry, you're in Sweden?" They don't realise that a lot of the games they play over in the US were developed in Scandinavia.

Damien Simper: That profile is changing a bit, though, at least in my experience. Obviously, the titles being produced here are creating a lot more awareness, and that's certainly a draw when the proof is in the pudding, so to speak.

What kind of growth can we expect to see in the region over the coming years?

Christofer Sundberg: Well, we're still growing, though it does feel somewhat like the industry's growing out of hand right now: it's all about making more sequels and more content. I'd rather see the industry grow via new concepts than through production for outside companies.

SL: We're working really hard on not becoming too large, keeping the development philosophy that we started with and having a smaller studio environment that can work on larger products. We're very wary of

becoming a factory. In the game industry, it seems that everyone goes from one project to many projects. It's a challenging thing to resolve – just because we have technological opportunities doesn't mean we should be putting more people on them. We've held lectures on procedural content generation, for example. We have to think how we'll be creating games ten years from now. We can't have 1,000 people working on a single game for five years – it's impossible.

MA: We're trying at IO to go from having huge teams to small teams, having more productions and outsourcing much of the work to China. Like you said, though, it's about being smarter.

SL: Outsourcing is still kind of a new thing in the industry – people don't recognise it or why it's so important. Our primary goal isn't to reduce costs, it's to distribute the production and make sure we don't leave too many of our Stockholm people, you know, on a line. The people we have here are passionate and creative – we don't want to keep them waiting.

PH: I think what Christofer says about being innovative within your games and franchises is the key to growth, not just for us but for the region. We need that environment in each and every place if we're to stand out as a place for development. That's what we're focusing on at DICE. We have a huge franchise in *Battlefield*, but even in that field we need to innovate if we want to sell anything. And you have *Hitman*, obviously [gestures to IO]. It's not just about us but about nurturing the smaller companies as well, acting as role models for how you make games.

Mette Godsk: Originally, we wanted to grow very aggressively – and we then slowed down very aggressively instead. We wouldn't have been able to do 'smart growth' if we'd just gone and hired our 100 people right away. We wouldn't have guaranteed the original IP that we want to work on. And it's hard

– we've been fighting with that for years and we're struggling. We all know that.

Ivar Kristjansson: We grew extremely fast during the past 18 months, from 50 people to 240 people, and there've been a lot of challenges. Obviously, it's difficult when you're up in Iceland. It's one of the reasons why we merged with a company in the States [White Wolf, the US RPG specialist and creator of Vampire: The Masquerade] – because there's a lot of talent there, and it's an easier decision for people to move to Atlanta.

SL: You see, with what you're saying about CCP growing from 50 to 240 people, I think number 51 would have still felt quite new. But compared to number 240… that's quite a seniority. So how do you get number 51 to actually understand that he or she must reflect the values of the company? We had a recent discussion about this: people thought they were quite new but, actually, when you look at it, they were pretty senior.

CS: We're still trying to find the processes to go with that and, well, come to terms with the fact that these are *people* here. You can't expect people who've been with you two months to bring the 'studio feel' to those just starting, but maybe they have to when you're growing this aggressively.

So how do you cope?

IK: Well, we've been quite lucky in that we've been able to strike a balance between veterans and rookies. Also, we've been able to recruit really good middle-managers – people who are really experienced with working on bigger projects. You do lose a bit of the cosiness, though – that sense of being one family working through this together – when you don't know people's names any more.

DM: This is where outsourcing comes in as well, because you have to be careful what you decide to

"You don't want people losing their roles as artisans. That's what drew me to Scandinavia – there are great artists here"

outsource. If you get rid of an entire tier of work, you risk leaving newcomers with nothing to get started on. So it's important to maintain some balance. And you don't want a system where experienced people are pushed up into management roles, always delegating and losing their roles as artisans. That's what drew me to Scandinavia – it's clear there are great artists here, able to ply their craft.

The Nordic Game Conference is perhaps the region's biggest opportunity for industry exposure. What does it need to do?

CS: Move to Stockholm?

[Laughter]

MG: Lower the entry price for students?

PH: I think moving is they key. Malmo [home of Massive Entertainment and venue for the NGC] is in between everything but it's also nowhere. I think we could actually move it to Copenhagen or Oslo, to Reykjavik or Stockholm and it would attract more interest. In fact, sending it around would be more interesting. People just aren't very interested in attending – that's my view of it all.

MG: Malmo's not very sexy. Or easy. The problem this year was that it was very accessible to students, but the price was so high that they chose not to go. It was good for business, though, for the first time. There were a lot of contacts there who we'd normally

have to travel a long way to speak to. But for people who should really benefit – say, from our studio, who we could send on an educational level – then no.

CS: A lot of the speakers were good this year, and that's a motivation to send someone. But the list does need to improve and become more in-depth. Right now you'll get some visionary, or someone who wants to sell some middleware, but that's it.

SL: If they improve the content then there's an awful lot of potential there. There are a lot of senior people in the region who know a lot about game development, who constantly try to push technology and content. If we're having art, design and tech topics then we need people there who can talk about those issues, providing something that an artist can relate to. So they can say: 'That's interesting, but I did it like this. Our way is better'. That kind of thing brings value.

Do you think the Nordic region can continue as a development hotspot forever, or will there be an inevitable decline?

IK: If we can provide unique intellectual content, with a strong global appeal, we'll be in a strong position overall. I'm not saying licensed content is bad, but there's a difference: you have to, in some cases, enter a bidding war with other developers. I mean, Starbreeze has a great reputation for taking a licence and building a great game out of it, but if we continue just to do that then we must avoid being branded for it. The UK has experienced that, to a degree.

RN: I think we are at the tipping point, where you guys [to IO] are doing *Kane & Lynch* and you [to DICE] are creating new IP with *Mirror's Edge*. So a lot of companies have established both themselves and their IP. And now we're getting the opportunities to do *really* interesting things. So it's not so much

licensed games – we actually see very few of those in Scandinavia – though there have been a lot of sequels, what with *Hitman* and *Battlefield*, and Massive doing *Ground Control*. The core, however, is still the creativity and technology.

How much of your workforce is comprised of foreign workers right now?

MG: Twenty per cent of our workforce, at least in production. That is by no means a goal in itself, though, which would be pointless. Yes, it makes sense to have different cultural eyes look at a game's content, but that's not the aim. And it will never be. It would be a very costly affair to keep that goal, particularly if we have to keep relying on recruitment agencies to fill more senior roles.

IK: Close to 30 per cent of our employees in Iceland are foreigners, though it's easier to hire an Icelander. With foreigners there are always certain drawbacks – there's some family crisis and they need to move, for example. It's always a risk: Iceland is not that heavily populated so we don't have the luxury of just looking around. It's different in Sweden and other countries – you're a much bigger pool.

Eve Online, though, is a big source of talent. The average player age is 27-28 years old, they're well educated, and they love the game. So there's a lot of people we hire from our community. That probably helps explain the high rate of foreigners.

MA: Twenty-five per cent of our workforce are foreigners, and when we need experienced people we tend to get them from outside Denmark.

RN: It's about ten per cent at Starbreeze: a few from Nordic countries and a lot of Swedes. In general, though, talent is what it comes down to. If you're talented or motivated then you're welcome to apply. What we might need to get better at is lowering the threshold for people coming in. We

provide Swedish education at the office but people need help getting integrated. Also, things like helping out with social security and helping people understand that it isn't that complicated here. If you're in the EU you just move here and go to the tax office.

Which country gives you most of your foreign staff?

RN: Apart from Sweden I'd say the UK, and some of the East European countries like Poland, Russia and the Ukraine. If you could bunch all those together it'd be a big pool as well.

MG: We certainly see a greater number of applicants from the UK than we do the US. But we see a growing number from the US, which is a really promising development. What I'd like to see is a

> **"We're getting a lot of applicants now from Asia. From an art point of view we're seeing people who fancy coming to Sweden"**

greater number of applicants from the rest of Europe – not just the East European countries. Countries like Spain and France seem to have trouble finding the Nordic region somehow.

CS: That's because all the French developers are in Canada.

SL: We're getting a lot of applicants now from Asia, but then we have been outsourcing there for a long time. We have a good reputation in Asia, so from an

art point of view we're seeing people who've worked with us before, at another company, who fancy coming to Sweden. And I welcome that. In Shanghai it's getting very competitive and it'll be interesting to see what happens. I think a lot of studios there are thinking of moving abroad. That said, I've never seen an application from Japan.

IK: We have a Japanese girl working for us. I've no idea how she ended up in Iceland, though, but she's there now.

Do the Nordic governments recognise the needs and potential of the game industry?

PH: We haven't seen much of the supposed support, but they do see it as potentially a really big industry in Sweden.

CS: There is government support in the Nordics, but to be successful with that support you need more than money from government. There needs to be some commercial success contributing too, and there hasn't really been that so far. It needs more care when it comes to financing, and identifying what can be successful and maybe focusing less on the whole Nordic thing.

SL: But has anyone here been offered money? No. And that's the truth right there. If there's an image of us being successful because we get big grants, that's a misconception. There is a lot of potential for smaller developers to make XBLA games and smaller projects, but when you start out your ambitions end up higher. And that's tricky.

CS: XBLA is a great way to get started. The budgets are like $300-700,000 and there hasn't been one game that I know of that hasn't made a profit. And it's a fun way to start because it's limited, at least in terms of memory size. So you have to be creative – you can't have those huge environments with all those little lightbulbs dotted around.

From top:
Mette Godsk
(Deadline Games)
Robert Nyberg
(Starbreeze)
Peter Henriksson
(DICE)
Damien Simper
(IO Interactive)

MA: I saw yesterday that the EU's just started a programme where you can get some money – up to €100,000.

CS: I received a question yesterday from someone asking if that was possible, because the requirement is that you finance quite a big part of the project yourself, which pretty much rules out the small developers. Also, it has to be a cultural tie-in to Europe, which is at least easier than the Nordic one because that has to be tied in to Nordic culture, which is farmers and Vikings.

[Laughter]

IK: With respect to Christofer, I think he's being a

little bit negative. I've been working a little bit on this with the Nordic Ministry of Culture and I think they're giving away DKK6m for a five-year period. While it's not only going to companies, half of it is, and it's going to early-stage companies as well. And it helps. We granted some 15 companies in the region of DKK100-300,000 last spring. Another thing the money goes towards is sending people to exhibitions – it's like an umbrella for going to GDC, Nordic Game and Leipzig. But it's a one-year-old concept, so you won't see the results for another couple of years as the titles go to market.

MG: Money, though, isn't the only support that we need. We have issues with immigration laws. If we were more recognised then we'd be on the list of qualifications that the government identifies as a national need. So they would make it easier for us to

bring the talent into the country, and not what they do today which is sometimes deny people for no apparent reason.

MA: We haven't had anyone denied.

PH: Nor us. It's just a matter of time, really.

MG: But time can be a problem as well. If you have a US candidate who can leave his job within two weeks, but has to wait for three months for a visa to come through, then he has a problem, which will then become our problem.

IK: This is actually a great problem for us, which is why we look first in Iceland, then in Europe, and only then outside of Europe. If you're from the EU you can just come over and start working tomorrow. With the US it usually takes three months, which can be really frustrating. Then there was guy from South Africa who took six months, and he's a really talented guy. It's something we've been working with the government on, hammering and hammering until we get the point across.

MG: We had the wife of a French programmer who was denied family reunification in Denmark. She's Japanese and they would not allow her into the country because they had not lived in a European country together. And they were married.

RN: You can get a lot of this pushed through, though, if you lean on people a bit.

CS: You should always have someone from the immigration service on your Christmas card list.

Is there much competition between you all?

RN: The only real competition is staff. There's a healthy competition when it comes to technology, but it's not about fighting over deals.

CS: I literally ran into the guys from Starbreeze at a publisher's door once, but it's true – it's more about looking for the same talent.

MG: To be honest, when an employee is finding it attractive to speak to a headhunter, the game is over already. There was this debate about how studios should create policies against headhunting, but if it's come to that then you've lost already. That said, we still have a gentleman's agreement between Deadline and IO that we don't headhunt.

MA: Ultimately, if we're to keep our reputation as a hotspot of game development, we don't need each other's staff – we need each other.

SOURCE CODE
How 20 years of demo culture have shown Nordic developers how it's done

You'll often hear the demoscene referred to as an 'underground' movement, and for once the definition rings true. A diehard community of bedroom coders and artists, formed almost entirely in Europe, it isn't just an inspiration to Nordic game development – it's a low-level constituent of it. By existing on a technological frontier during the '80s and '90s, it helped shape perceptions of what the PC, Commodore 64, Amiga and Atari ST could achieve. Now, by existing at the

all-new code dedicated to calling out friends and cussing rivals, backed by chip tunes and neat special effects. Groups such as Fairlight and Razor 1911 – specifically their rogue elements, disowned now by the legitimate majority – continue the practice to this day. But for many sceners it was a stepping stone to a more substantial, rewarding showpiece: the demo.

In this context, that doesn't mean a feature-limited version of a retail game, as you'd see on Xbox Live Marketplace or the average magazine

In earlier eras, when the hardware race was slow, the demo was the cutting edge

heart of the region's development community, it helps shape some of the most exciting videogames in the western world.

Its origins lie in the shady realm of '80s software cracking, where the stripping of a game's copy protection was as much a subject of pride as of challenge or intrigue. Before long, crackers began labelling their conquests, first with edits to title screens and later with extravagant 'cracktros' –

covermount. As any Amiga or ST owner will tell you, it's more like a music video in which the stars – the composer, visual artists and coders – appear solely through their work. Literally a demonstration of technical and creative flair, it's usually non-interactive, linear, and entirely freeform in its subject and style. During the 8- and 16bit eras, when home computers were big money and the hardware race slow, the demo was the cutting edge.

Run by a community of 200 volunteers, Assembly continues to draw the crowds (and their computers) to Helsinki, Finland
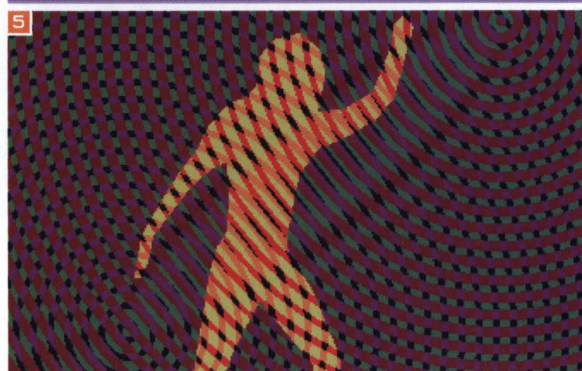
More sophisticated than what appeared onscreen, be it parallax-scrolling starfields, dancing polygons or raster bars, was what didn't. The genius of the demo lay in the method more than the result, the limited capacity of disk and tape inspiring breakthrough use of real time rendering and 'decrunching' techniques. The aim was to produce as much as possible, to as high a standard as possible, with a bare minimum of code.

Apply this to modern technology, where the HD era has made asset-efficiency topical again, and the scene's importance for game developers becomes obvious. There's nothing remotely surprising about the migration of '80s and '90s sceners into '00s development companies: as students became graduates and professionals, their hobby evolved into a career. In the Nordic countries, especially, their talent and thrift with code, music and artwork made them invaluable to studios where in-house technology was ubiquitous.

"To me, remaining at the frontline of demos/ game development is like riding on the back of an angry dragon," says **Mikael Kalms**, a former member of the group C-Lotus who's now, as well as member of group The Black Lotus, a coder at DICE. "But making a game run well today is more work than making a demo run well, because game project sizes have ballooned. Even if ten per cent of a game project is performance-critical, that's already more code and assets than you'd find in an entire demo."

Adds **Magnus Sjoberg**, a DICE colleague otherwise known as Pantaloon of the group Triad: "The Amiga had a more hardware-limited setup and so did the C64, so you really had to optimise and cheat wherever you could. Nowadays, we have multi-cores and non-fixed platforms [PCs] which make it harder in some aspects but easier in others."

A recent headcount at DICE estimated that 25 of its 260 staff are, or have been, key members of the demoscene. Contributing groups include The Silents, Fairlight, TRSI, TBL, Powerline, Rage, Rebels, Fiction, Omega, Sardonyx, Phenomena, Up Rough and Sonik Clique. And across the region, in studios such as Avalanche and Remedy, you'll see a similar heritage.
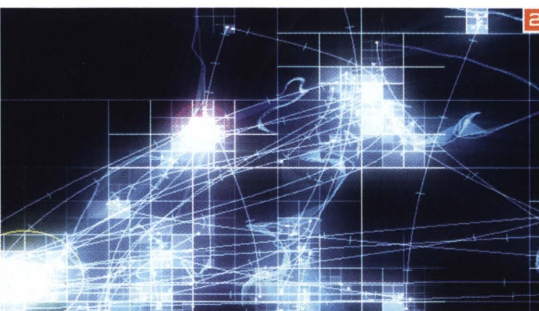
WORLD PARTY

Though it draws unique strength from the demoscene now, the Nordic region wasn't alone in creating it. Hungary and Germany played as great a role, as did the UK and France. British studios such as Team 17 and Bullfrog were largely comprised of local sceners, and the influence lives on in Peter Molyneux's current studio, Lionhead. Scene parties, meanwhile, continue across Europe with events such as Breakpoint (Germany), Sundown (UK), Riverwash (Eastern Europe), Backlash (Sweden), Dihalt (Russia) and Simulaatio (Finland), to name but a few. Recent years have seen mounting concerns, however, over the dilution of events such as Norway's The Gathering with other, potentially conflicting interests such as game tournaments and corporate recruitment drives.

Andromeda Software Design's Lifeforce demo took this year's demoscene by storm, conjuring all of the sequences seen below – and across the base of the following two pages

Old school: **1** A typical 'cracktro', in this case for Delphine's *Flashback*. **2** Readme.prg by TEX, released in 1987 at the beginning of the ST demoscene. **3** Charles Deenen's Game Music IV for C64, one of the very first demos, released in 1985. **4** Spanning four Amiga floppies, the Phaleon GigaDemo by NeXT. **5** State Of The Art by Spaceballs, one of many 'music video' demos for the Amiga. **6** Sure to strike a chord with any Amiga fan, the RSI MegaDemo by Red Sector, released in 1989

Starbreeze Studios, developer of *The Chronicles of Riddick: Escape From Butcher Bay* and *The Darkness*, was notably founded by two sceners, its games displaying all the hallmarks of scene ingenuity.

"Many sceners obtain a basic skillset that's needed later on with commercial development," explains **Bent Stamnes**, PR manager for scene.org and organiser of Norways's Solskogen demo party. "Developers nowadays require a wider toolset than before, but the demoscene is still a good place to learn about harnessing the best out of a team and handling deadlines. And it's a competitive environment in which to grow unique skills."

Or, as Kalms puts it, to "keep it real". From the start, competition has been the dynamo behind all scene activity. Unlike internet forum posts, however, with their ecstasies of sanctimony, here the contention is over something more worthwhile: quality. Rigorous and efficient coding was so crucial to the old-school sceners that rivalries between them became tantalisingly harsh. If technical craft was the most important aspect of '80s and '90s demos, the friction between groups was the most memorable. Sideswipes at groups deemed lazy or cocky, known affectionately as 'fuckings', were a routine highlight of early releases, their venom spiked with a garish palette dubbed 'the Dutch colour scheme'.

Have such things matured now that offices have replaced bedrooms? Kalms believes so, to the doubtless relief of his employers: "The industry is fairly well-connected and there certainly is some friendly bantering between us developers. But it has a more positive vibe than in the demoscene of old, where a few people liked to get personal and ugly."

Surprisingly – and contrary to the occasional report of its death – the scene hasn't suffered as a result of its staff going pro. Rather, commercial awareness of its history and potential has helped sustain it, lending big-name sponsorships to its websites and events. Hollywood animation studio Pixar recently donated $4,000 to scene.org, the largest online resource, joining others such as Guerrilla Games and Rotterdam University. The site, a non-profit organisation founded in 1997, now serves over 8.4Tb of scene-related data a year.

Meanwhile, Assembly, the scene's most
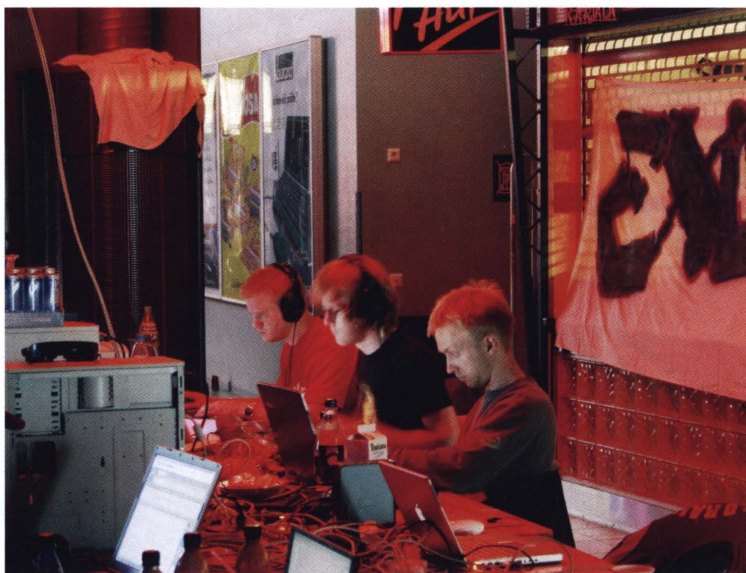
Coders, artists and musicians share knowledge at Assembly 2006. The competition events are the inevitable highlight, especially those in which the very best groups put together entire demos under timed conditions
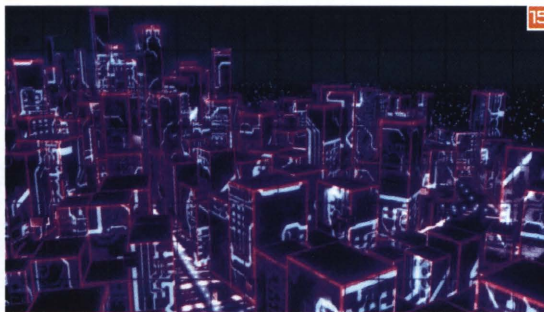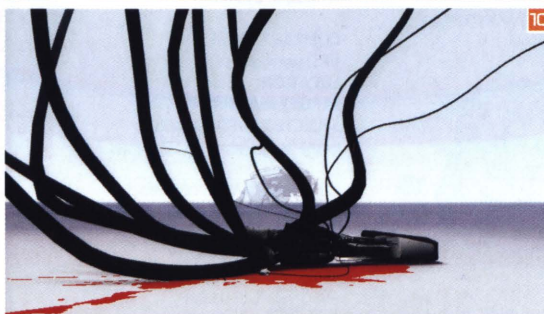
beigning : a small

established party – around 5,000 sceners attend yearly in a tradition which dates back over two decades – now enjoys strong ties with Microsoft and the PC hardware trade. Kalms has fond memories of last year's event: "One of our latest [demos] was certainly our greatest: The Black Lotus' Starstruck, released for the Amiga 1200. We battled against 13 PC demos in the main demo competition – and wiped the floor with them. We're updating our toolchain this year, but in 2008 it's time to show people how it's done again."

Pixar recently donated $4,000 to scene.org, the largest online demoscene resource

The pseudonyms might change, and disappear from the EA-branded business cards (it's hard to imagine members of GBA group Shitfaced Clowns bringing that name to a meeting), but some things never do. In all likelihood, Kalms just sent a message to another popular group, Andromeda Software Design, which at this year's Assembly entered a new PC demo called Lifeforce, hailed by some as the greatest ever made. Have a look at it on appropriately equipped kit and you'll understand why.

Clearly, the demoscene is as much as force now as the studios it's created, staffed and inspired. In an exclusive announcement, Stamnes reveals how he and two of his colleagues have been invited to San Francisco to host outreach seminars for Intel, Nvidia and Pixar. Multinational corporations, Academy Award-winning film studios, hardware pioneers and AAA software houses: all are crowded on the doorstep.

"These days, much of the technological innovation happens in commercial development circles," explains Stamnes, "and is then adopted into different demo engines as the coders observe the tips and tricks. But there are some things that go the other way, like the size-optimising and procedurally generated stuff. Look at what Will Wright said about Spore." (In one interview, Wright described how 'incredibly exciting' he found the demoscene's optimisation methods, and admitted that he looked to it for inspiration.)

The Nordic region doesn't have the monopoly on such activity, but it's doesn't need it either. While others start to recognise the potential behind those innocuous lightshows, barrages of techno tunes and cheeky hacks, the studios here have known it from the start. The codes of the scene – innovation, enthusiasm and diligence – are written in its DNA.
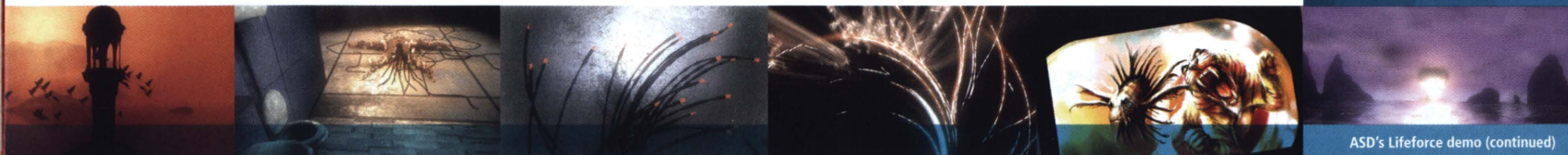
ASD's Lifeforce demo (continued)

🇩🇰 DENMARK

COMPANY NAME: Certus
URL: www.certus.dk
LOCATION: 3 Odense
TARGET MARKET: Mobile
SELECTED SOFTOGRAPHY:
Symfoni (mobile dev platform)

COMPANY NAME: Deadline Games
URL: www.deadlinegames.com
LOCATION: 4 Copenhagen
TARGET MARKET: Console
SELECTED SOFTOGRAPHY: Chili Con Carnage

COMPANY NAME: Flux Studios
URL: www.flux-studios.com
LOCATION: 4 Copenhagen
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: War Incorporated

COMPANY NAME: IO Interactive
URL: www.ioi.dk
LOCATION: 4 Copenhagen
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY:
Hitman: Blood Money

COMPANY NAME: ITE
URL: www.ite.dk
LOCATION: 4 Copenhagen
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY:
Agent Hugo: RoboRumble

COMPANY NAME: Savannah Interactive
URL: www.savannah.dk
LOCATION: 4 Copenhagen
TARGET MARKET: Mac/PC
SELECTED SOFTOGRAPHY: Bille & Trille

COMPANY NAME: Sirius Games
URL: www.siriusgames.biz
LOCATION: 4 Copenhagen
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: Paradise City

COMPANY NAME: Tabula Rasa Games
URL: www.tabularasagames.com
LOCATION: 4 Copenhagen
TARGET MARKET: PC
SELECTED SOFTOGRAPHY:
Hannibal: Vengance of Carthage

COMPANY NAME: Ubisoft (Denmark)
URL: www.ubi.com
LOCATION: 4 Copenhagen
TARGET MARKET: Console/handheld/mobile/PC
SELECTED SOFTOGRAPHY:
Tom Clancy's Splinter Cell: Conviction

🇫🇮 FINLAND

COMPANY NAME: Bugbear Entertainment
URL: www.bugbear.fi
LOCATION: 16 Helsinki
TARGET MARKET: Console
SELECTED SOFTOGRAPHY: FlatOut 2

COMPANY NAME: Encore Games
(now known as Nitro Games)
URL: www.encoregames.fi
LOCATION: 16 Helsinki
TARGET MARKET: PC
SELECTED SOFTOGRAPHY:
East India Company

COMPANY NAME: Frozenbyte
URL: www.frozenbyte.com
LOCATION: Helsinki
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: Shadowgrounds

COMPANY NAME: Housemarque Oy
URL: www.housemarque.com
LOCATION: 16 Helsinki
TARGET MARKET: Console
SELECTED SOFTOGRAPHY: Super Stardust HD

COMPANY NAME: Recoil Games
URL: www.recoilgames.com
LOCATION: 16 Helsinki
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY: Earth No More

COMPANY NAME: Remedy Entertainment
URL: www.remedygames.com
LOCATION: 18 Olari
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY: Alan Wake

COMPANY NAME: Sense Entertainment
URL: www.sensegames.com
LOCATION: 17 Kuopio
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY:
Piggy Jiggy In The Land Of Wacko Jacko

COMPANY NAME: Ubisoft (Finland)
URL: www.ubi.com/fi
LOCATION: 16 Helsinki
TARGET MARKET: Console/handheld/mobile/PC
SELECTED SOFTOGRAPHY:
Tom Clancy's Splinter Cell: Conviction

🇮🇸 ICELAND

COMPANY NAME: CCP
URL: ccpgames.com
LOCATION: 1 Reykjavik
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: EVE Online

🇳🇴 NORWAY

COMPANY NAME: Funcom
URL: www.funcom.com
LOCATION: 2 Oslo
TARGET MARKET: PC
SELECTED SOFTOGRAPHY:
Age Of Conan: Hyborian Adventures

COMPANY NAME: Running Games
URL: www.running-games.as
LOCATION: 2 Oslo
TARGET MARKET: PC
SELECTED SOFTOGRAPHY:
Medieval Kingdoms

COMPANY NAME: Ubisoft (Norway)
URL: www.ubisoft.no
LOCATION: 2 Oslo
TARGET MARKET: Console/handheld/mobile/PC
SELECTED SOFTOGRAPHY:
Tom Clancy's Splinter Cell: Conviction

🇸🇪 SWEDEN

COMPANY NAME: Atomic Elbow
URL: www.atomicelbow.com
LOCATION: 13 Sundsvall
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY: Switchball

COMPANY NAME: Avalanche Studios
URL: www.avalanchestudios.se
LOCATION: 12 Stockholm
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY: Just Cause

COMPANY NAME: Coldwood Interactive
URL: www.coldwood.com
LOCATION: 15 Umea
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY:
Freak Out: Extreme Freeride

COMPANY NAME: Digital Illusions CE
URL: www.dice.se
LOCATION: 12 Stockholm
TARGET MARKET: Console/handheld/mobile/PC
SELECTED SOFTOGRAPHY: Battlefield 2142

COMPANY NAME: Frictional Games
URL: frictionalgames.com
LOCATION: 5 Helsingborg
TARGET MARKET: PC
SELECTED SOFTOGRAPHY:
Penumbra: Overture

COMPANY NAME: Grin
URL: www.grin.se
LOCATION: 12 Stockholm
TARGET MARKET: PC
SELECTED SOFTOGRAPHY:
Ghost Recon Advanced Warfighter 2

COMPANY NAME: Legendo
URL: www.legendo.com
LOCATION: 7 Gothenburg
TARGET MARKET: PC
SELECTED SOFTOGRAPHY:
Attack On Pearl Harbor

COMPANY NAME: Lockpick Entertainment
URL: www.lockpick.se
LOCATION: 9 Skovde
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: Dreamlords

COMPANY NAME: Massive Entertainment
URL: www.massive.se
LOCATION: 6 Malmo
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: World In Conflict

COMPANY NAME: Paradox Interactive
URL: www.paradoxplaza.com
LOCATION: 12 Stockholm
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: Europa Universalis

COMPANY NAME: Silent Grove Studios
URL: www.silent-grove.com
LOCATION: 12 Haninge
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: Dawnspire

COMPANY NAME: SimBin
URL: www.simbin.se
LOCATION: 8 Vara
TARGET MARKET: Console/PC
**SELECTED SOFTOGRAPHY:** GT Legends

COMPANY NAME: Southend Interactive
URL: www.southend.se
LOCATION: 6 Malmo
TARGET MARKET: Console/handheld/PC
SELECTED SOFTOGRAPHY: The Da Vinci Code

COMPANY NAME: Starbreeze
URL: www.starbreeze.com
LOCATION: 11 Uppsala
TARGET MARKET: Console/PC
SELECTED SOFTOGRAPHY: The Darkness

COMPANY NAME: Team Tarsier
URL: www.tarsier.se
LOCATION: 10 Karlshamn
TARGET MARKET: PC
SELECTED SOFTOGRAPHY: The Desert Diner

COMPANY NAME: Ubisoft (Sweden)
URL: www.ubi.com/se
LOCATION: 12 Stockholm
TARGET MARKET: Console/handheld/mobile/PC
SELECTED SOFTOGRAPHY:
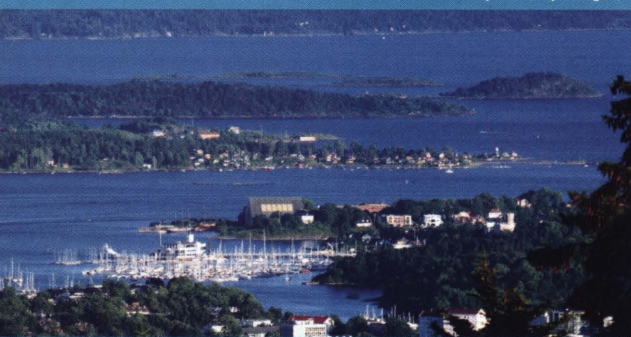Tom Clancy's Splinter Cell: Conviction
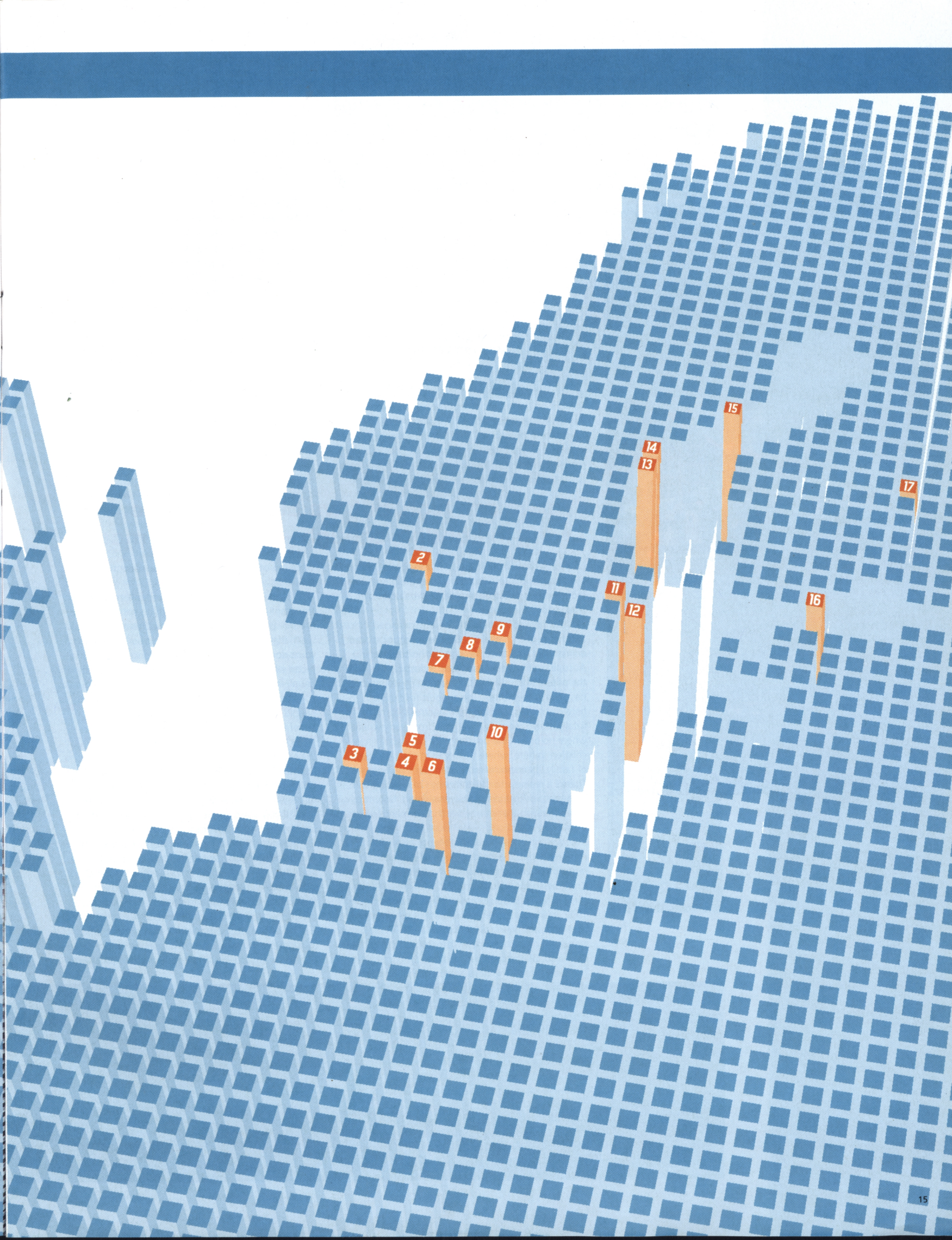
CALL OF THE NORTH

Thinking about a move to the Nordic region?
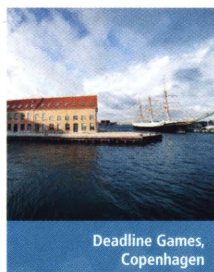## Time to consider some of the finer points...

Helsinki

Nyhavn (Copenhagen)

Oslo

Deadline Games, Copenhagen

People who make games like nothing more than to escape – to criminal underworlds, abandoned space stations, troubled paradises and neon megalopolises. But never to Sweden. Or Denmark. Or the other Nordic countries. Never has a sharply dressed digital Dane run riot on the streets of Copenhagen (such a game would surely be called *GTA: Nice City*), and while survival horrors sometimes head north for their finales, it's usually to Alaska rather than Iceland. This, together with a similar phobia across global pop-culture, leaves applicants to Nordic studios guessing when it comes to lifestyle.

Certainly, this cluster of five countries and their satellite territories is where the beautiful people live. A night on the streets of Stockholm, Copenhagen or Reykjavik is quite capable of wreaking havoc on an Englander's self-esteem, the UK's gene pool feeling more like a septic tank in comparison. Their buildings emanate efficiency. Their road users know how to put pedestrians in their place. And their air is cool and

"Taxes are high, but we also get value. Living in London, though – that's just mad"

crisp, much like their fashions. But for many with an eye to moving internationally within the game industry, even these generalisations are unknown. And yet still they come.

"I'm here for the experience of working in another country," explains **Damien Simper**, a lead animator at IO Interactive who cut his teeth in Australia's cutscene outsourcing industry. "And the potential for staying on and putting down roots has always been there. The support for families here is amazing; coming from Australia, some of it's totally blown me away. I've gone from somewhere where no one in the development community has children to here, where there's an immediate sense of family – something more than just making games. There's a realness to the company I'm working with here that, in Australia, is still developing. Now my wife's thinking that maybe we should spend less time at the pub."

"We're not like other short-term, cellar-door companies that maybe don't have the options in terms of providing job security," adds **Ivar Kristjansson**, CFO of Iceland's CCP Games. "Even if some of our companies haven't been around since 1992, many of us in the development community have and are coming back now with families and a long-term desire to work in Scandinavia. It's creating both a social and creative structure."

To an extent, this goes against the view of larger Nordic cities being fashionable centres for the young and socially mobile. But **Stefan Ljundqvist**, art director at Stockholm's Avalanche Studios, is quick to reassure. "All this family talk – that's just for the people who *have* families," he says. "Obviously, Stockholm and Copenhagen have great social environments, too. That's the advantage of being based in a capital, and it's the same in London. Many of us have studios based in capitals."

Continually referring to Sweden, Denmark, Iceland, Norway and Finland as a collective might seem unflattering, or at best crude, but there are commonalities. Those preconceptions of ultra-efficiency, social respect and laconic temperaments

aren't without merit. The key differences, believes **Peter Henriksson**, HR manager at DICE, are professional. "It's the hierarchical aspect," he explains. "And I think this goes for Avalanche as well. The Swedish companies are very flat in terms of how people work. The goal at DICE is to really allow everyone to speak their mind and be listened to, even if a recruiter or HR guy wants to talk about game design. We've been focusing a lot not only on being a studio that makes great games, but also to be the best studio at *making* games. If we're better at making games, we become better at coaching and working with our talent and their careers. That's the main goal – to establish a studio where talent can grow."

And what of the region's reputation – deserved or not – for high taxes in exchange for such fine living? "I think if you compare [Stockholm] to the other capitals in Europe then actually it's not that expensive to live," he insists. "Taxes are high, but we also get value out of those taxes. Living in London, though – now that's just mad.

"It's always interesting when you talk to a person from the UK or somewhere and try to sell them ideas like free public healthcare. 'Well, we have that as well', they'll say. And that's true, but ours works and yours doesn't. That's the main difference. We tend to moan when the subway's three or four minutes late – people in the UK don't get it at all. Or it's stopped or something like that. So it's always a matter of telling people that's it's a *working* system which you can benefit from – not just that it exists."

"I think you have to stick around a few years in the Nordic region to really feel the benefits of the high tax," says **Mette Godsk**, HR manager at Copenhagen's Deadline Games. "You're paying so much into things you won't automatically benefit from. If you don't get sick you don't benefit from the healthcare; if you don't raise a family you don't see the benefits there. So I think for the single guy in his one-bedroom apartment it's difficult to find the appeal of paying this high tax. I mean, it's not higher than France yet *they* don't have a reputation for paying high tax. We have to do something about this image, because it's really not that bad."

Ljungvist concurs. Applicants, he suggests, should consider not just what they're paying, but what they're being paid *for*. What good are low taxes and

Gothenburg

Stockholm

a cheap cost of living if you're burning the midnight oil for little or no overtime pay? Nordic developers, he explains, are opposed to such models – "You have to give slack to people who are putting in their hearts and souls" – and you're unlikely to find many EA Spouses working in these offices, even at DICE.

"For the companies running multiple projects," says Henriksson, "it's not just that they're long but that one project is flowing straight into another. People shouldn't need ten weeks' holiday – they should be fit and well and innovative. So cutting down overtime to near-zero is vital. Another difference is the social security within employment here. You can't just kick people out of the door – you have to take care of them, develop them, help them reach their goals."

To many already working at studios elsewhere, especially under the tyranny of AAA development, three meals a day might seem a foreign concept next to, say, a liquid lunch and a sleeping bag. But the message from Nordic studios is clear: you can sign up for paid holidays with any job, but how many actually honour that contract? A great deal of social responsibility seems to inform the region's businesses, as it has done throughout recent history. Rather than pay for luxuries to offset the agonies of working life, people here invest in a more rounded, compassionate system of welfare and civil service.

Though none of this, of course, answers the question of just how expensive these societies are, in between all the creative indulgence and family time. "I find that a lot of things balance out here," says Simper. "The rent is low but the eating out and the luxuries – they're quite expensive. Eating out in

Which raises the question of language. With studios elsewhere in Europe – Crytek, particularly – boasting of their international working environments, how easy it is for a monolingual English-speaker to bed in?

"It's no problem at all," says Simper. "And I wouldn't be comfortable with a policy that enforces English. I'm actually a little ashamed that I work in Denmark and effectively force English on other people. All of our communications and meetings are in English already and I have no problem communicating with the guys around the office. They'll have conversations in Danish, but if I want to join in they accommodate me. If anything, I would have liked to have learned more Danish by now, but I haven't because it's so easy to speak English, not just in the studio but anywhere in Europe."

Christofer Sundberg, cofounder and chairman of Avalanche Studios, goes one further. "Actually, I think it's a good policy [to enforce English]. We have

Starbreeze, Uppsala

"We always switch to English when we want to speak faster. We're lazy like that"

Australia's quite cheap so I guess that's a difference."
"And that's what nurtures the rumour," adds Henriksson, "because [holidaymakers] come here and they eat out all the time, and that is quite expensive."

And really, when you consider the number of Britons, Americans and Eastern Europeans already working here, it's quite academic, too. The fact is that the price of milk isn't going to deter people who come to region out of love for its games – and there are plenty of those. The beauty of *Eve Online* and *Just Cause*, the character of *Hitman*, *Total Overdose* and *The Darkness*, and the sheer calibre of *Battlefield* mean there'll always be people – not just artists, but designers and programmers – drawn to their creators.

it when we have guys from the UK working for us – it's the only way to make them feel at home. If two Swedish guys bump into each other by the coffee machine it's different, but there's so much social conversation that's important to production that you can't miss out on it." Adds Henriksson: "At DICE we provide Swedish lessons for everyone that comes here, though we don't have a policy. But there comes a time, when a person's been there for some time, when we need to start speaking Swedish to them. Because otherwise they'll never learn. But we're always switching to English when we want to speak faster, or get a faster confirmation to something. I guess we're lazy like that."

IO Interactive, Copenhagen

Blue Lagoon and Reykjavic

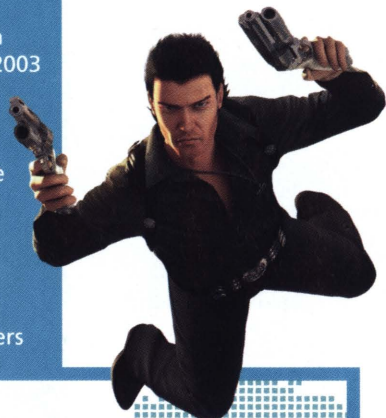# AVALANCHE STUDIOS
The creator of Just Cause promises a whiteout of new titles and technology

NAME:
Avalanche Studios
LOCATION:
Stockholm, Sweden
DATE FOUNDED: 2003
NUMBER OF EMPLOYEES: 130
URL: www.avalanchestudios.se
SOFTOGRAPHY:
Just Cause,
Just Cause 2
(in development),
two unannounced
open-world actioners

Born from the ashes of Rock Solid, a startup described by cofounder Christofer Sunberg as having "stepped on every mine development has to offer", Avalanche Studios has learned its trade the hard way. The experience, however, has taught it much about the pitfalls of the modern industry: difficult transitions between projects, potentially unwieldy team sizes, and the dilemma of having enough people to get started while finding the money to pay them. Together with cofounder Linus Blomberg, Sunberg has built Avalanche to become Sweden's largest independent developer.

At the heart of both its games and business lies some exceptionally powerful tech – the Avalanche

Engine – developed by an in-house R&D unit which works independently of its design teams. A startling first glimpse came in **E**153, soon to be followed by the studio's first commercial game. Published by Eidos, *Just Cause* was a warmly received, sun-baked jaunt around a paradise overrun by organised crime. Part *Far Cry* and part *GTA*, available for a variety of formats from PS2 to Xbox 360, it proved beyond doubt the versatility of its technology, not to mention its creator's eye for the genre's potential.

With three separate IPs in development, all signed to publishers, Avalanche now copes with demand by farming out much of its workload to companies in Shanghai. Its new Stockholm studio, meanwhile, just down the road from DICE, houses three specialist teams of designers, coders and artists who form each game's creative core. Dedicated to producing fresh IP rather than licensed titles and ports, its goal is to push the boundaries of technology and design while keeping outside distractions to a minimum. A privately owned company, it has no external board of directors or shareholders.

Next on the slate, already well into its development, is *Just Cause 2*, a sequel designed exclusively for the new generation of platforms. The title marks the second of Avalanche's collaborations with UK publisher Eidos, and the debut of a substantially revised version of its engine.
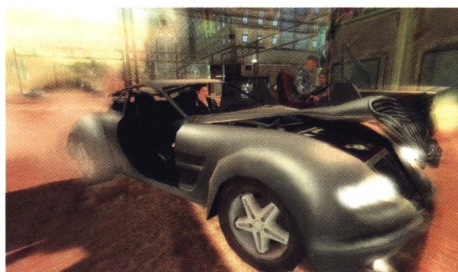
Fans of improvised action rejoice: all three of Avalanche's upcoming games promise the same kind of play in their distinct environments

1 The latest Avalanche Engine looks set to give CryEngine 2 a run for its money, at least when it comes to rendering dense, sumptuous jungle and intricate mountains. Sustained R&D has dramatically improved its urban environments, as players of the studio's upcoming new IP will discover. **2** Reviews for *Just Cause* were almost entirely positive, many focusing on the game's technology as much as its design. Bringing its exquisite world to so many formats, spanning multiple generations of console, was a remarkable feat
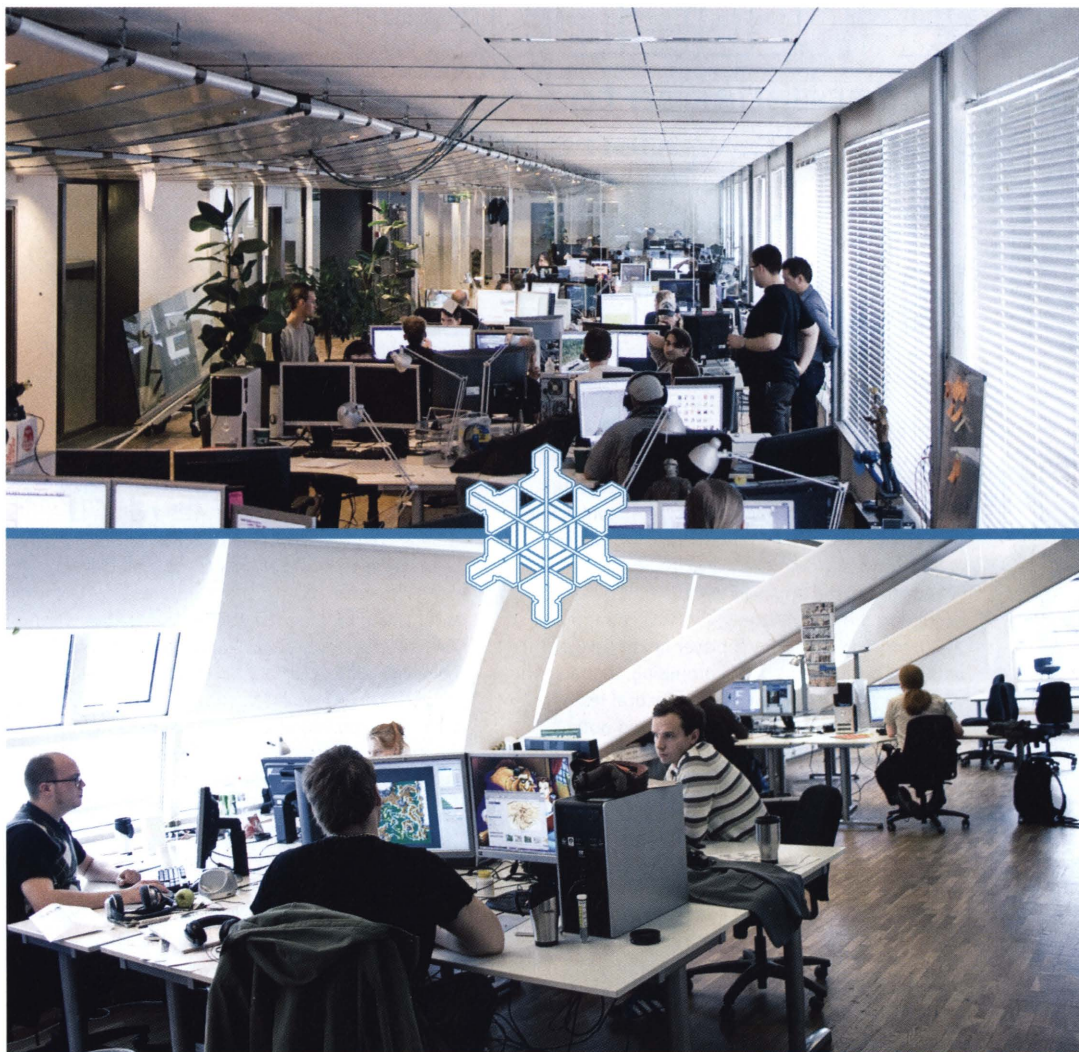
Interview:
Christofer Sundberg

Creative director ■

In general terms, where do you source your staff?
Contrary to what I thought originally, we don't have anyone from outside Sweden. We had one guy but it turned out he was half-Russian [laughs]. It's not a policy we have to not hire people from outside – we'd love to see some more international applicants here. In general, though, we hire from schools and universities. We try to have a balanced mix of different skills: some of our employees are graduates and others are garage hackers. And that's really good because the educated programmers are really structured while the hackers really know the shortcuts and how to get stuff going onscreen.

How much outsourcing are you doing now?
Our team is actually really small. We have about ten to 15 artists here internally on a team of 130, so we try to have the specialists here and outsource everything else. But the demands on skills have increased so much that we need the people at the outsourcing stages to be very talented as well – as much so as the people we

have internally. We developed a system here where they can upload their work and get feedback on it, which takes advantage of the time difference between there and here. When they go to bed, we get to work.

Is it hard to attract new staff having produced only one game?
When we get people to apply and get them here, we can open up the doors and show them what we work on. That's less of a problem. It's getting people to apply to us that's difficult. I really don't like headhunting – it's not good for business – but if you ask me Sweden has become like the Wild West. Everyone's using Facebook and LinkedIn and what have you; we've got DICE calling us and our guys calling them. But at least it's still on a friendly level. I don't have the management of DICE calling me up and asking me to stop recruiting their staff, and we all keep it out of working hours.

And how about your relationship with publishers?
We get questions on an almost daily basis from big publishers asking us for new concepts. We try to customise

each concept for each publisher – we're not guessing what they want. If they ask us for something and we don't have it we just bounce the question back. Even though the projects we have right now are all action games set in open worlds, they're in completely different settings. What they have in common is that they're all designed completely around the technology; it would be impossible to develop them on another.

Can you see a future in which Avalanche is publisher-owned?
I shouldn't say that we'll never start discussing a sale, because that usually comes along after a few years. But we've had the questions from different publishers, and right now we don't feel a need to merge with a publisher. We like our independence. We like the freedom of creating our own IPs and pretty much whatever we want. I mean, giving up that freedom is a big step for us as shareholders as well, and we're making good money. If we were to sell it would be because it was too good an offer to refuse. Otherwise, why do it? That's when you lose all the fun.

19

DICE
DIGITAL ILLUSIONS CREATIVE ENTERTAINMENT
AN EA COMPANY

DIGITAL ILLUSIONS CE
Why loss of independence to EA has done little to stifle freedom at Sweden's biggest studio

- **NAME:** DICE (Digital Illusions Creative Entertainment)
- **LOCATION:** Stockholm, Sweden
- **DATE FOUNDED:** 1992
- **NUMBER OF EMPLOYEES:** 270
- **URL:** www.dice.se
- **SELECTED SOFTOGRAPHY:** Battlefield 1942, Battlefield 2, Rallisport Challenge 1 & 2

One of many Nordic studios born out of early demo culture, DICE was founded in 1988 by Fredrik Liljegren (aka Animal) and Andreas Axelsson (aka Goofy), both members of the group The Silents. In 1992, the studio propelled itself on to the commercial gaming table with the Amiga hit, *Pinball Dreams*. Two sequels later came its first rally and racing games, one a commercial title for Volvo, the others released locally to the Nordic territories. These caught the attention of Microsoft, which later published its most highly regarded driving series, *Rallisport Challenge*.

Though based originally in Gothenburg, DICE acquired a Stockholm studio, Refraction Games, in 2000, together with a multiplayer firstperson shooter entitled *Codename: Eagle*. A promising, if erratic, game, *Eagle*'s vehicle combat and tactical teamplay were recognised for their innovation and potential in an emerging broadband age. That potential was then realised in 2002, to spectacular effect, in *Battlefield 1942*.

Prior to its focus on original concepts and properties, the studio was no stranger to licensed development. A number of children's titles were produced for various home and handheld platforms, most notably Shrek and Barbie games. The Sega Saturn and PlayStation, meanwhile, saw a brief return to commercial roots with *True Pinball*. The publishing partnership with Microsoft also birthed the acclaimed free-roaming race title, *Midtown Madness 3*.

DICE consolidated its operations into a new Stockholm studio in 2004, where it continued to develop *Battlefield* as a triple-A franchise. Two years later, following a brief period of stockholder resistance, publisher EA completed a long-anticipated acquisition, closing a satellite studio in Ontario, Canada. Since then, the company has grown to become a multi-team developer of original IP, presently employing around 270 people.

In addition to a new single- and multiplayer *Battlefield* game, *Battlefield: Bad Company*, its current slate includes the potentially groundbreaking *Mirror's Edge*, a futuristic FPS which prides itself on the realism of its interface and locomotion systems. Both titles are expected to arrive on shop shelves in 2008. Another team, meanwhile, is working on a secretive third IP, with additional staff dedicated to long-term technical support and R&D.

In keeping with modern project management models such as Scrum, DICE employs cross-functional teams across the board. Programmers work with developers to maximise their creative potential, though no specific model is forced upon anyone. The company's mission statement is simple: to be the best studio in EA. And that, it believes, means always finding your own ways of doing things.

1 Word has it that *Mirror's Edge* is at a surprisingly advanced stage of development. DICE will reveal more details soon. **2** The power of the latest console and computer hardware has given *Battlefield: Bad Company* a significant boost in terms of real-world physics and visual fidelity. **3** *Battlefield 1942*, a milestone in the use of vehicles in a multiplayer FPS. **4** *Battlefield 2* brought the series up to date, both technically and militarily. It blasted its way to an **Edge** 9/10. **5** Few expected *Battlefield 2142* to last long against an impending *Enemy Territory: Quake Wars*, but delays to the latter and a robust design kept it in the fight. **6** One of the Amiga's most fondly remembered titles, *Pinball Dreams* would be unmatched still were it not for *Flipnic*. **7** In the absence of a *Sega Rally* or confident *Colin McRae* instalment, *Rallisport Challenge* was seen as the leading rally game of its generation
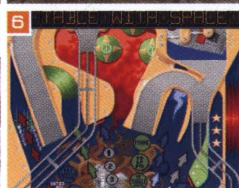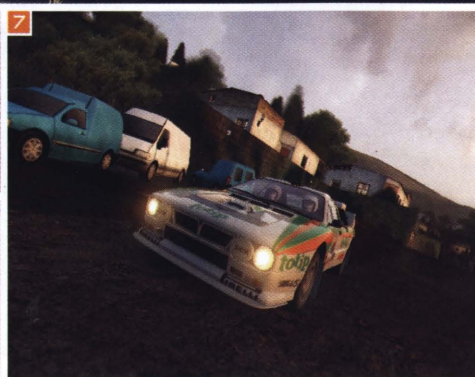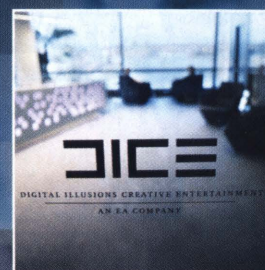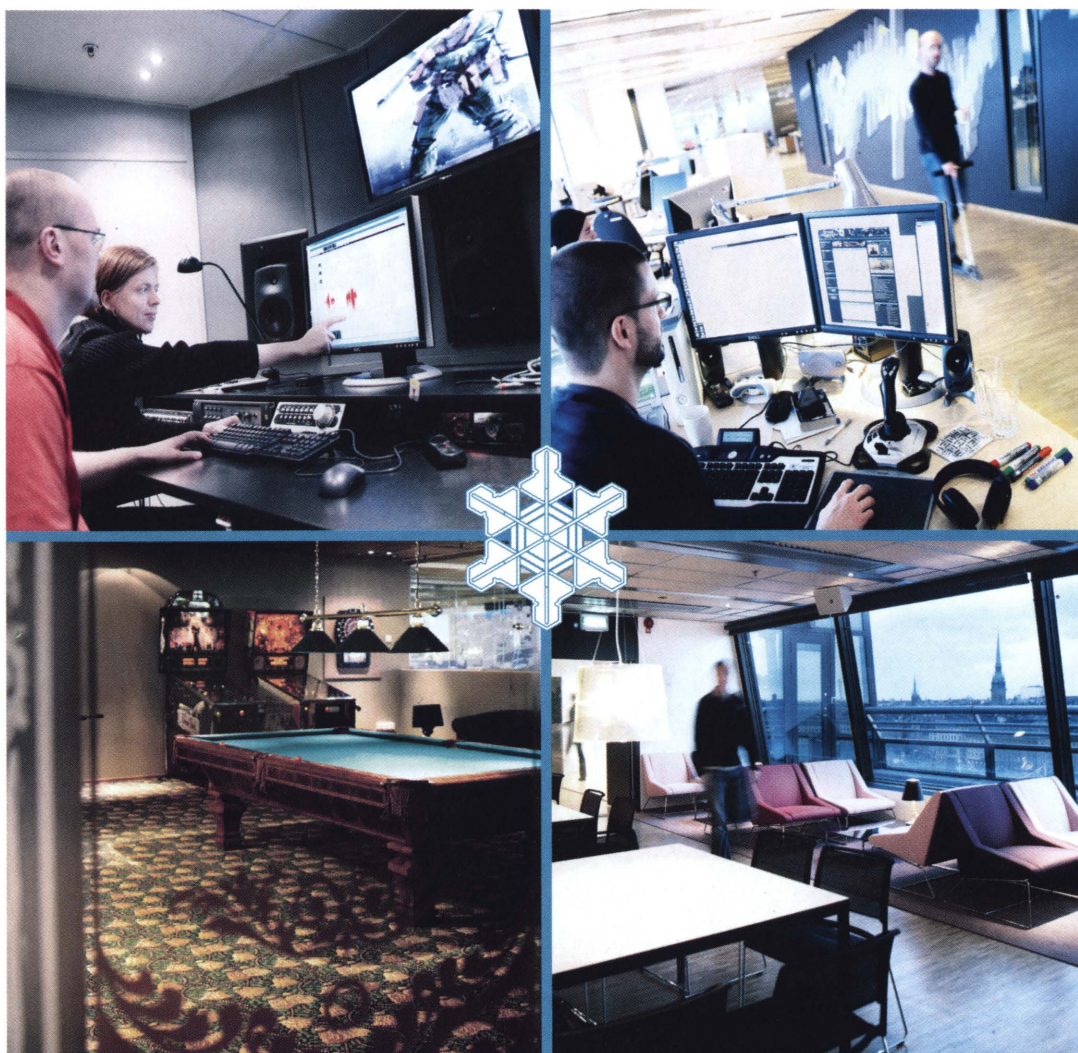
Interview:
Peter Henriksson

HR manager ■

Where do DICE's project choices and IP come from? Are they ever from EA?
They're definitely, always from within DICE. Take *Mirror's Edge*, for example.

How have things changed under EA's ownership? Were your offices here part of the deal?
No, this is a DICE thing. In fact, we had this office before we became a fully owned part of EA. The developers probably don't feel the change, though EA has enormous resources which we are learning how to use. EA University is one. Also, having the possibility to always talk to a member of the *Black* team or the *Burnout* team, or whatever team, to find out how they solve a studio problem is great.

In general terms, do you find EA to be quite hands-off?
Yeah, very much so. Of course, you have all the reporting stuff that people like me have to do, but the production should be *more* autonomous now. We don't have the same need for selling or pitching to publishers on our games. And we have a strong position within EA, which is good.

Do you share staff with EA as well as information?
We help each other out all the time. Sometimes that means someone transferring here because they want to leave and work in this studio instead, and sometimes it's the other way around. Sometimes it's just about getting the most out of EA Europe, or for that matter EA US. That happens quite a lot.

What's the breakdown of nationalities at DICE?
Well, we won't have too many – about 20 nationalities I'd imagine. And about 20 per cent of the workforce are non-Swedish. It's not a choice that we have made to be either Swedish or international. We care about the Swedish values and we want to be a Swedish company, but we don't care so much where people are from. It's about the quality and the core process. We want the best talent – it doesn't matter if they're from Costa Rica or Germany or Stockholm.

Given the diversity, do you have any rules about communication within the company?
There are no general rules – we always speak English during meetings when there's someone foreign there. And we always provide training in Swedish for someone when they have the chance. There come times when we have to push them to speak Swedish in the meetings as well, so they can learn and train themselves to be better. Then, if there's something that doesn't translate so well, we'll switch back over to English. Swedes do tend to be very lazy, though, and are always switching over to English because it's faster.

How do you help foreign applicants make the move over to Sweden?
It's not a problem – it's just a question of time, mostly. We offer all the help that's needed – we tailor a relocation package for each person who comes here. We always find them an apartment or house; we move the furniture and stuff like that. Sometimes we provide them with free trips home if they need that, because for young people it's a big decision to move from across the Atlantic.

What's your next step?

Quality   Innovation   Fun

DICE

Learn more about EA DICE, Mirror's Edge and see all of our open positions at dice.se or jobs.ea.com

EA

STARBREEZE STUDIOS
The demoscene's most successful offspring demonstrates its mastery of adaptation

- **NAME:**
  Starbreeze Studios
- **LOCATION:**
  Uppsala, Sweden
- **DATE FOUNDED:** 2001
- **NUMBER OF EMPLOYEES:** 70
- **URL:**
  www.starbreeze.com
- **SOFTOGRAPHY:**
  Outforce,
  The Chronicles
  Of Riddick: Escape
  From Butcher Bay,
  The Darkness,
  The Chronicles Of
  Riddick: Assault
  On Dark Athena
  (in development)

Three words you might use to describe the work of Starbreeze: enthralling, eccentric, explosive. One of few Nordic studios to take on licensed and original IP with equal relish, it's won favour over recent years for its densely cinematic, utterly faithful treatments of *The Chronicles Of Riddick* and *The Darkness*.

The Starbreeze which exists today can be traced to a merger of two studios, O3 Games and Starbreeze Studios, in 2001. Founded in 1998, O3 specialised in small-scale PC development, while the existing Starbreeze, also founded in 1998, comprised a number of key players from the '80s and '90s demo scene. Founder Magnus Högdahl (aka Vogue of the group Triton) was famed for demos such as Crystal Dream 1 & 2, while Gustaf Grefberg (aka LizardKing) was a celebrated musician for both the PC and Amiga. Under the merger, this original Starbreeze became O3's game development and R&D department, the company fully adopting the Starbreeze Studios name in 2002. Its mission: to be recognised as one of the leading action-adventure developers in the world.

Like many of its Nordic peers, its strength as a developer of AAA titles is rooted in its technology, the robust and versatile Starbreeze Engine. Having powered both *Riddick* and *The Darkness*, the engine has evolved continuously across hardware platforms and generations. Meanwhile, an in-house game editor, dubbed Ogier, has evolved alongside it since 1998, and was released to the public in 2004.

To offset the inherent risks of large-scale development, Starbreeze develops its games on a pre-financed basis, its publishers typically owning the production rights and handling marketing, QA and distribution. Once the investment has been met by the game's sales, additional royalties make their way back to the developer. This method, together with a sustained quality of output, has earned the studio a reputation for both cost-efficiency and timeliness. Its workforce includes talent of various nationalities, the studio keen to expand while tackling its latest projects.

From offices in Uppsala, home of the oldest university in Scandinavia, Starbreeze is currently working on a bigger, better version of *The Chronicles Of Riddick: Escape From Butcher Bay*. *The Chronicles of Riddick: Assault On Dark Athena* brings the highly regarded Xbox FPS to the latest generation of consoles, with all the visual upgrades you'd expect of the latest Starbreeze Engine.

While its current workforce totals 70 employees, the studio hopes to grow enough to support two parallel teams over the coming months. Sensibly, however, it's treating that prospect with both care and caution.

1 The Starbreeze offices in Uppsala are just a short distance from Stockholm's Arlanda airport, not to mention the capital itself. Despite a vibrant nightlife and culture, it's a small town, most studio staff living within walking distance. **2** A slick adaptation of Top Cow's enigmatic comic book, *The Darkness* pushed the studio's in-house engine in all kinds of novel directions. **3** *The Chronicles Of Riddick: Escape From Butcher Bay* established Starbreeze's wisdom in the complex field of licensed adaptations

IO INTERACTIVE

Guns, guns, guns... The creator of Hitman has growth - and Hollywood - in its sights
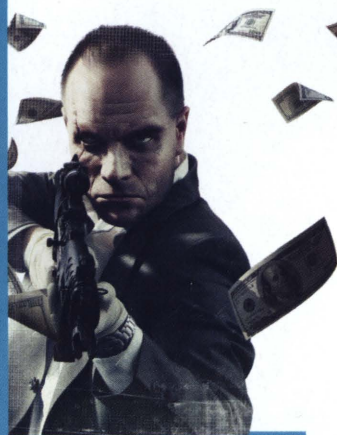

Io-Interactive

- **NAME:** IO Interactive
- **LOCATION:** Copenhagen, Denmark
- **DATE FOUNDED:** 1998
- **NUMBER OF EMPLOYEES:** 175
- **URL:** www.ioi.dk
- **SELECTED SOFTOGRAPHY:** The Hitman series, Freedom Fighters, Kane & Lynch: Dead Men

There aren't many studios, especially in the Nordic territories, that can brag about seeing their debut title grow into a multimillion-selling franchise. With an award-winning soundtrack. And a movie adaptation. With *Hitman: Codename 47*, however, its gleefully merciless game of stealth-assassination, that's what happened to IO Interactive.

Founded in 1998 as a joint venture between Nordisk Film & TV and game developer Reto-Moto, IO is one of several Nordic studios to enjoy a long-term, profitable relationship with UK publisher Eidos. Moreover, Eidos added the company to its portfolio in 2004, doubtless attracted to its multinational talent, popular IP and powerful in-house technology. With offices situated in the heart of Copenhagen, it enjoys strong ties with Denmark's schools, universities and art colleges, while its developer network extends to include companies such as Microsoft, Intel and Sony.

To date, IO has released five titles which between them have sold over 10m copies. Endlessly inventive, the *Hitman* series has attracted a loyal fan base over its four instalments: *Hitman: Codename 47* (2000), *Hitman 2: Silent Assassin* (2002), *Hitman Contracts* (2004) and *Hitman Blood Money* (2006). In 2003, IO also developed *Freedom Fighters* for EA, which like its other games has enjoyed sales of over 1.5m copies.

To equip its games with state-of-the-art tech, IO has chosen to develop its core code internally.
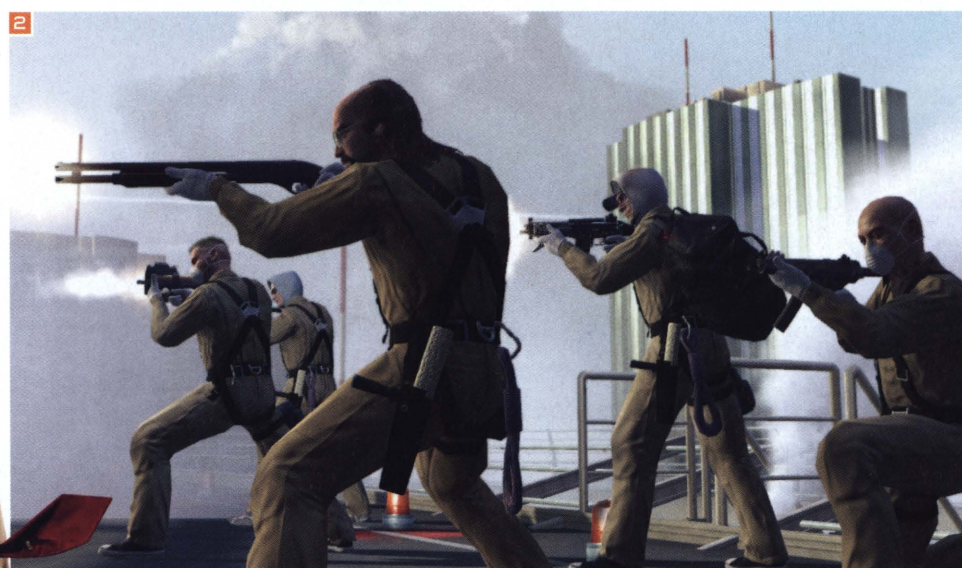
A technology department of 30 employees works to constantly improve the Glacier Engine, which to date has powered games for PS2, PS3, Xbox, Xbox 360, PC and GameCube. Next year will see the completion of its latest version, Glacier 2, designed to facilitate quick workflows through efficient, flexible tools.

The studio's workforce of 175 employees, comprising 23 nationalities, is expected to reach 200 over the next six months. Importance is placed on the work/life balance, with crunch-times tightly controlled and a 37-hour week employed during routine work. Relocation packages help foreign applicants with initial rent, flight costs and paperwork, with candidates encouraged to spend a few days in Copenhagen to appreciate this dynamic capital city. Around 25 employees are sent yearly to GDC, with others attending Siggraph and similar conferences as part of an ongoing education programme.

This Christmas will see the debut of IO's latest IP, the incendiary crime shooter *Kane & Lynch: Dead Men*. While superficially similar to the *Hitman* series – it's character-based, movie-inspired and unapologetically violent – the game's also a spiritual successor to another of IO's successes, *Freedom Fighters*. Boasting complex light and shadow effects, sophisticated crowd AI and destructible environments, it's an ideal vehicle for the latest Glacier technology.
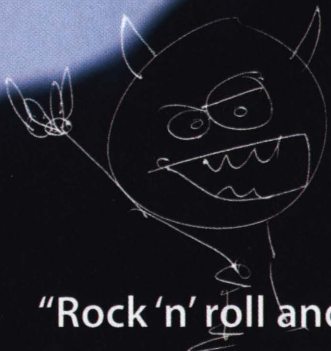
1 The IO offices are, in true Nordic style, some of the swankiest you'll ever see. **2** It's been a long time coming, but *Kane & Lynch: Dead Men* has lost none of its psychopathic, over-medicated charm. **3** With each new *Hitman* comes a raft of new features and technical tricks. The latest, *Blood Money*, brought dense crowd scenes to the job. **4** A strong squad-based dynamic and Jesper Kyd music stood *Freedom Fighters* apart

DEADLINE GAMES

For a studio with 12 titles in development, there's little chance of time standing still

DEADLINE GAMES

- **NAME:** Deadline Games
- **LOCATION:** Copenhagen, Denmark
- **DATE FOUNDED:** 1996
- **NUMBER OF EMPLOYEES:** 80
- **URL:** www.deadlinegames.com
- **SELECTED SOFTOGRAPHY:** BlackOut, The Angel, Globetrotter, Total Overdose

Originally a TV production company, Deadline founded its dedicated game department in 1996, keen to enter the PlayStation age while the entry requirements were still reasonable. In 1997 it joined TATI, a Swedish company, to form Vision Park Entertainment, a developer-owned publishing company. The TV division was then sold off to create a company focused solely on games.

A management takeover in 2001, by creative director Simon Andreasen and president Chris Mottes, saw the consolidation of Deadline Games, now repositioned as an international console game developer. Proprietary in-house development tools were devised and a deal was signed with Take-Two's Gathering label to develop *Total Overdose*, a rambunctious thirdperson shooter inspired by Robert Rodriguez's Desperado trilogy. Following the closure of Gathering in 2005, the game was picked up by SCi and, following its purchase of Eidos, published under the Eidos banner later that year. Warmly received by critics, it earned specific praise for its abundant character, sense of humour and tight controls.

Deadline was relisted on the Copenhagen Stock Exchange in late 2005, the goal being to fund three development teams, more original IP, and the evolution of its technology to the standards of modern hardware. Having recently completed a PSP version of *Total Overdose*, dubbed *Chili Con Carnage*, it now has two games in development for the latest generation of consoles, one of which charts the CIA's bid to capture Columbian drugs baron Pablo Escobar. A massive deal with Eidos and Warner Bros, meanwhile, has lined up ten more over the next three years, all based on characters from the Hanna-Barbera cartoons.

Deadline's in-house technology, centred on the Kapow Game Engine, will allow company-wide collaboration on all of these games, both for console and handheld formats. Always evolving, it now supports the very latest physics, AI and rendering technologies for multi-core platforms. An internal QA department, meanwhile, works closely with the designers, artists and programmers throughout every stage of development. As with many Nordic studios, its technology is maintained and developed by a central R&D unit.

An Agile development model, meanwhile, encourages employees to excel within their fields of expertise. Deadline believes that a common project language is critical, citing a mantra of: 'Know where you are, what you are doing and at what risk'. In order to motivate employees through challenging work and ongoing education, its staff development program includes an allowance of DKK12,000 (£1,100, awarded after a year's employment) to fund conference visits and external tuition.

1 Deadline employees enjoy a 37-hour working week – part of the studio's policy of keeping a healthy balance of creative development and project management, work and life. Five weeks of paid holiday are also guaranteed, along with Denmark's national holidays. **2** *Max Payne*-style gunplay, intelligent controls and a memorable fetish for hats helped *Total Overdose* put Deadline on the map. **3** By staying true to the spirit and looks of the original *Total Overdose*, and adding new features for portable play, PSP's *Chili Con Carnage* validated its developer's cross-platform credentials. **4** Further expansion of the *Overdose* franchise saw mobile outfit Impressionware develop a successful adaptation for Java-enabled mobile phones

WE ARE HIRING

DATABASE ADMINISTRATOR

To be part of a team that manages and operates all IT infrastructure. IT infrastructure includes the operation of EVE-Online clusters with large MS SQL installation, in which performance and reliability remain critical to the company. Main responsibility stays to manage and tune performance of the company SQL servers but also to take part in the planning, managing of other centralized IT systems like Exchange, Virtualization clusters, AD and so forth.

USER INTERFACE & AUDIO DEVELOPER

The ideal candidate needs good experience in programming UI, skills in graphic design and prototyping necessary to represent these ideas in a visually convincing way. The ability to create interactive prototypes in Flash is a big plus. The developer would also be responsible for integrating third audio engines into the client application as well as working with hardware and driver manufactures on sound support. Experience in client-based application UI development is required.

TECHNICAL ARTIST

To integrate art into the EVE game engine using both in-house and existing art tools. To assist in building new shaders, animations, effects and graphics functionalities in our rendering engine.

GAME LOGIC PROTOTYPE PROGRAMMER

To build a bridge between game designers and core programming group, rapidly prototyping and iterating game systems for upcoming expansions. Must be well organized and with good object oriented programming and SQL skills.

NETWORK ENGINEER

To develop, implement and operate CCP's network infrastructure. Also required to work with the development, marketing, customer support and others teams in analysis and design. To provide technical and architectural direction on our international office network infrastructure and the operation of MMOGs.

DATABASE PROGRAMMER

With emphasis on database programming for our software group to help make and maintain MMO platform systems. Platform systems include global game systems (like chat or event logging), metrics, and other game systems global to the game service. The successful candidate will have expertknowledge of and experience in the design, implementation and continuing support of client/server database applications using Python in Microsoft SQL. Experience and knowledge of database procedural programming is required.

All positions demands high organizational capabilities, excellent people skills, flawless written and reading English skills and the ability to thrive in a dynamic environment, where things changes rapidly. More information on requirements and what education/skills are preferable for each position are on our webpage: www.ccpgames.com/jobs

CCP

CCP GAMES

From the glaciers of Iceland to the vacuum of space. Meet the maker of Earth's coolest MMO
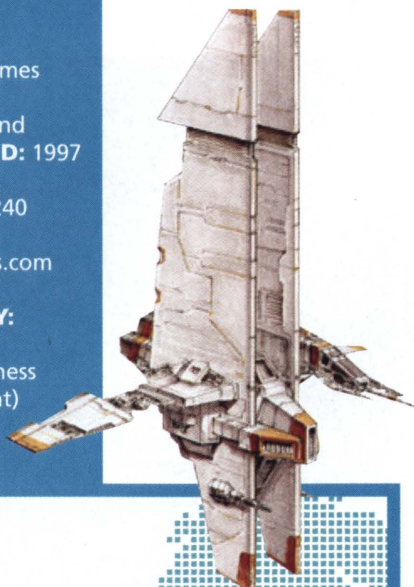
- **NAME:** CCP Games
- **LOCATION:** Reykjavik, Iceland
- **DATE FOUNDED:** 1997
- **NUMBER OF EMPLOYEES:** 240
- **URL:** www.ccpgames.com
- **SELECTED SOFTOGRAPHY:** Eve Online, World Of Darkness (in development)

A s if building and maintaining one of the world's most revered MMORPGs wasn't enough, *Eve Online* creator CCP Games has to do so from Iceland, one of the most remote Nordic regions. Its gameworld, however, a spectacular universe of space trading, combat and corporate politics, is accessible to PCs anywhere on Earth. As a result, the Reykjavik studio has managed to attract more programmers and artists from the UK and US than almost any other in Europe.

Founded in June 1997 by Reynir Hardarson, Thorolfur Beck and Ivar Kristjansson with the specific goal of making MMOs, CCP funded its initial efforts through the release of a board game entitled Danger Game, securing a further $2.6m from private investors in Iceland. Its initial team of 21, half of whom were recruited from dotcom company OZ Communications, has since grown to employ over 240 people. In the meantime, *Eve Online*'s userbase has swelled to over 180,000 subscribers.

Much of the studio's geographical dilemma was solved when, in November 2006, it merged with traditional RPG maker White Wolf, creator of pen-and-paper RPG Vampire: The Masquerade. By extending development facilities to White Wolf's studio in Atlanta in the US, it created new opportunities for applicants unwilling or unable to relocate to Europe.

"Virtual worlds are a new form of entertainment, separate from traditional computer games," said CEO **Hilmar Petursson** at the time. "By combining forces, we will create a company unsurpassed in quality, innovation, and scope which will keep us at the forefront of this emerging trend."

With its strong focus on art as a cornerstone of MMO design, CCP has a specific interest in artists capable of fusing classical tastes and disciplines with modern digital practices. Likewise, its technical teams are faced with a constant, twofold challenge: powering spectacular visuals at the client end while supporting ever more players on dedicated server clusters. A modified Python scripting language makes implementing hotfixes and behavioural changes simple, but the perennial demands of the MMO remain: managing a virtual economy, devising interesting storylines, and keeping permanent dialogue with a vocal player community.

The workload's sure to increase, furthermore, as work continues on CCP's second major project, a videogame version of White Wolf's celebrated RPG, World Of Darkness. Set in a world inhabited by vampires and werewolves, the MMO adaptation's expected to take at least four years to develop, requiring the efforts of both its Reykjavik and Atlanta teams, together with its satellite studios in England, London and China.

[1] *Eve Online* has wowed players and onlookers alike for over four years. Its extraordinary visuals grow better with each of its online expansion packs, the most recent of which made things a great deal more accessible for first-time players. CCP's advanced server clusters mean that huge numbers of players can inhabit the same universe – the record, set in August, standing at 35,313
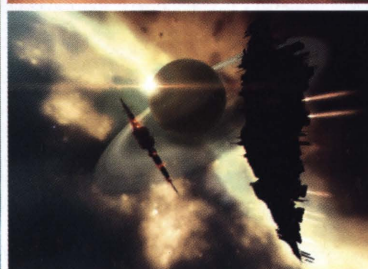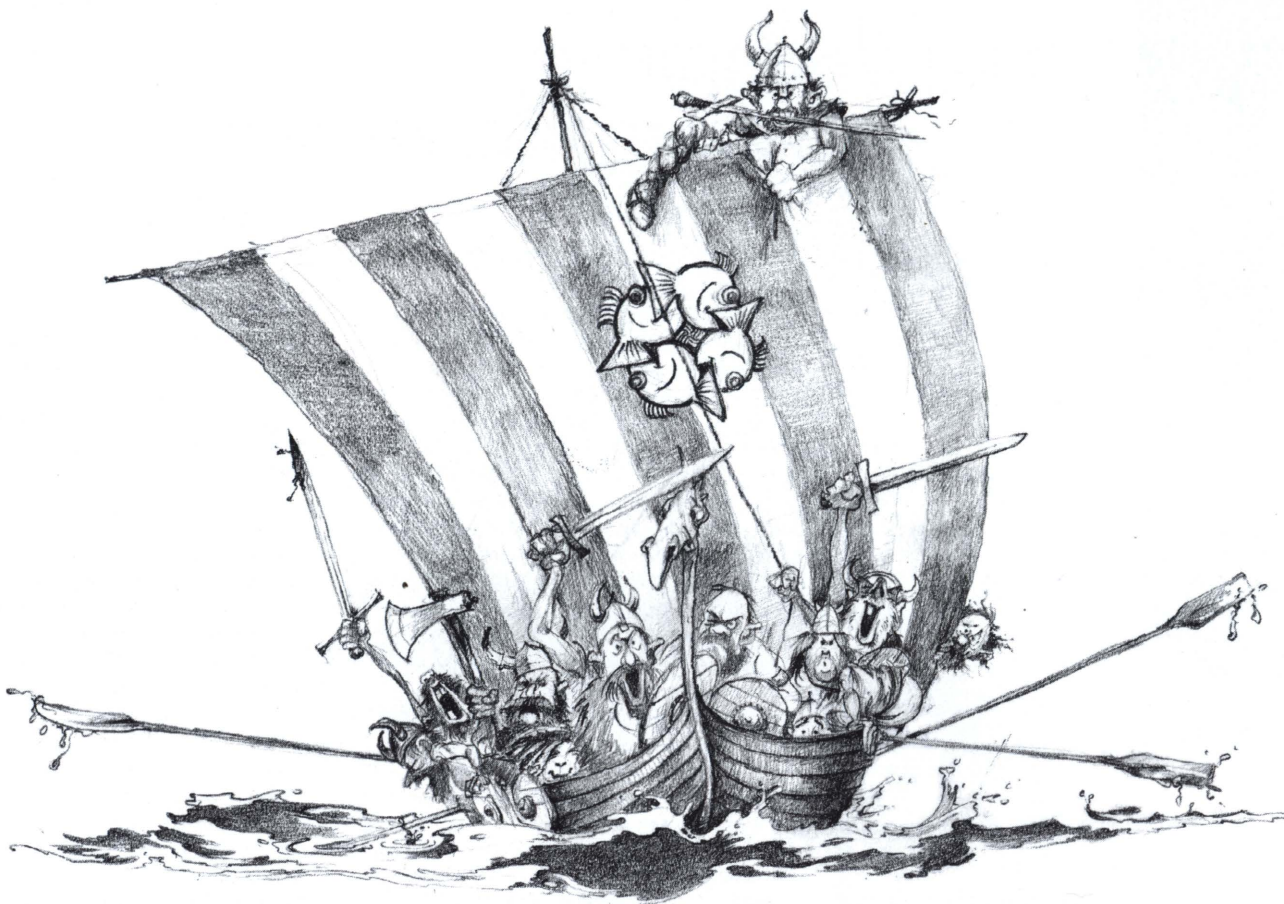
WE WERE ONCE THE INVADERS.
NOW IT'S PAYBACK TIME!

The prospects for loot and general mayhem may not be the same as in Days of Yore, but then again, the Vikings never had an event like Nordic Game...

WE'RE ALL HERE

At Nordic Game, you'll get acquainted with not only the Nordic region's finest talents, but their peers from the rest of Europe, North America and Asia – all in one place, for two days in May.

BE HAPPY

Nordic Game has never aimed to be the biggest event in the industry calendar – just the best. So let your hair down – enjoy a stimulating programme, exhibitions, social events, and the world's best conference refreshments in the company of friends and colleagues from around the world.

YOUR NEIGHBOURLY NEIGHBOURS

Common knowledge: In today's games industry, you're only as good as your community, and that is not something easily achieved in a business that redefined the term 'crunch time'. Nordic Game gives you countless opportunities to enlarge your social network, including the famous Nordic Cocktail Lounge. Feeling better now?

YOU COULD ALREADY BE HERE

By the time you finish reading this magazine, your journey could be over. The world's become a smaller place since we last 'visited' your isles; the return trip has never been easier. So pack your bags now for Europe's best games conference. Nordic Game, 14-15 May 2008, in Malmö, Sweden. Right next to Copenhagen Airport. Read more at **www.nordicgame.com**.

各国から優秀なゲームデザイナー、開発者が集まり、今後のデジタルエンタテインメントの可能性について意見を交換し合える素晴らしいイベントでした。こういったイベントが盛んになり、ゲーム、インタラクティブ・コンテンツの発展に繋がることを期待しています。

"It's a fantastic event where many excellent game designers and developers can get together, exchange their opinions and discuss the future potential of digital entertainment. I hope that this kind of event increases in popularity, promoting the development of games and interactive content."
– Masaya Matsuura, Artist and President of NanaOn-Sha, creator of PaRappa the Rapper and Vib-Ribbon.

"The Nordic Game conference is a high quality, thought provoking, and well balanced event which combines information, technical know how, business, and responsibility for the industry".
– Fred Hasson, CEO of Tiga, the UK developers industry association, and Chairman of EGDF, European Games Developer Federation.

nordicgame

14-15 MAY 2008, MALMÖ

[HELMETS ARE OPTIONAL.]

"Nordic Game has developed into being an industry conference of the highest quality. If you want to develop your knowledge about games and at the same time get in touch with all sides of the Nordic games community, this is the place to be."
– Martin Walfisz, President and Founder of Malmö-based developer Massive Entertainment, the makers of World in Conflict, and Chairman of Spelplan, the association of Swedish game developers.

THE NORDIC GAME PROGRAMME

How the government is helping rebuild the Nordic game industry from the inside out

Photography: IGDA

Erik Robertson, managing director of the Nordic Game Programme and events

The British film and Nordic game industries have a lot in common when it comes to money. Both have the talent required to make great products, yet the means and impetus to capitalise comes primarily from abroad. DICE is owned by Americans, IO by Brits, and while outfits such as Starbreeze and Remedy remain independent, they're still making games for international publishers. The solution, believes the organiser of the Nordic Game Programme, is far from simple.

"A lot of Nordic funds were going to traditional media to ensure the availability of quality content in our own languages," explains MD **Erik Robertson**. "However, in the case of games, which were rapidly becoming the most important entertainment media for many, there were no funds at all. We surveyed the availability of Nordic games and the state of our industry and then proposed remedies."

Thanks to funding by the ministers of culture for the five Nordic countries, the initiative can now do more than propose. DKK6m (£560,000) helped establish it during 2006, with exactly double that amount funding activities in 2007. For 2008-2012, the figure will rise to DKK15m (£1.4m) per year. In April, it was announced that 47 applications had been made for the first round of 2007 funding, requesting a total of DKK23m (£2.1m). The tricky part, of course, is deciding who gets it.

Injecting money straight into the development community would, it's said, put the cart before the horse somewhat. Only with improved infrastructure – a functioning market and distribution flow – can investment in studios be beneficial. Of specific interest is the potential of digital distribution channels, an example of which would be the GamersGate service launched recently by Sweden's Paradox Interactive. So while some funds will go to devs, more will go into other endeavours designed to bolster and expand the region's influence.

First there's the creation of NordicGame.net, an online directory of companies and organisations, with an event calendar and bulletin board for internship and employment opportunities. There's support for regional festivals and competitions, and for sending development staff to events such as E3, GDC and the Leipzig GC. And there's the Nordic Game Conference, now into its fourth year and keen to become the "leading meeting place" for Nordic game developers. Speakers this year came from as far afield as Korean and Japan, and included *SingStar* director Paulina Bozek and *LocoRoco* creator Tsutomu Kouno. However, its venue, the centrally located Swedish city of Malmo, has proved a controversial choice.

"The first two years of the conference were met with very healthy scepticism from Nordic developers, from the Swedes in particular," says Robertson. "The event really had to grow aggressively to gain visibility and make a difference. Considering our Nordic mandate, geography has always been an issue as well; a Helsinki, Oslo, or Stockholm conference would run the risk of being seen as a national affair. In the last two years we've placed ourselves on a very short list of recognised European games conferences, and we're doing our utmost to remain there."

In future, says Robertson, the selection and format of the conference will be decided by both its organisers and developers from across the Nordic region. Comments and suggestions from abroad, he adds, will also be welcome. How close is the event to reaching its goals? "It's approaching the halfway mark."
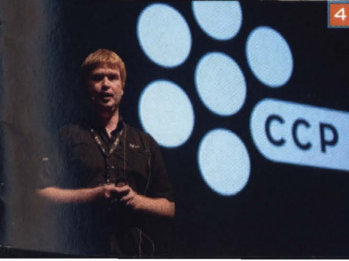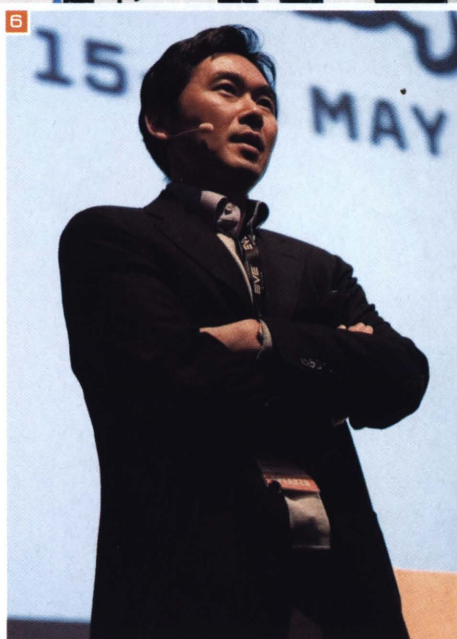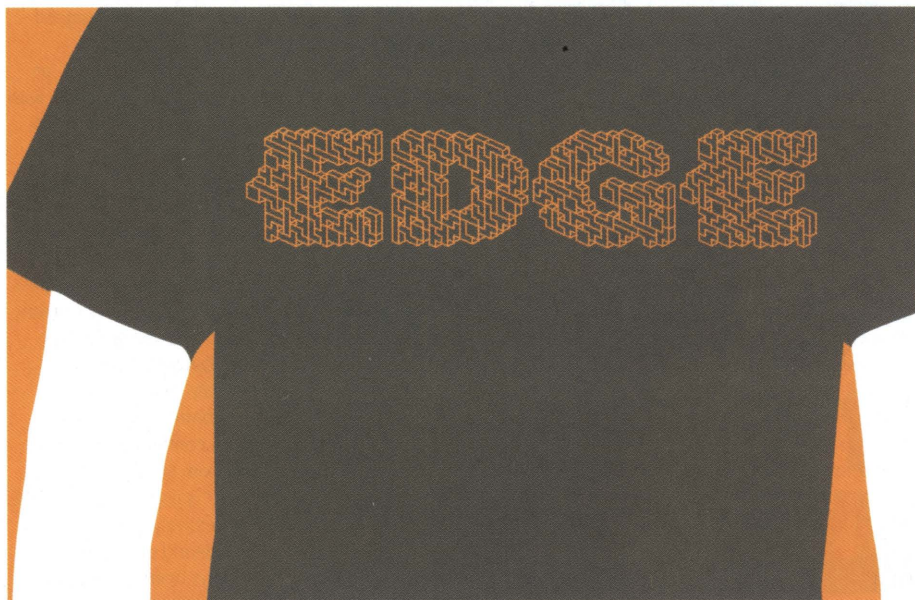

Photography: Jan de Sousa, Daily Rush, Denmark

1 Massive Entertainment chairman Martin Walfisz receives his studio's award for Most Innovative Game Technology at NGC 2007. **2** Inis cofounder Keiichi Yano describes taking *Gitaroo-Man* and *Elite Beat Agents* to the masses. **3** Barbara Lippe, lead artist at virtual world creator Avaloop. **4** CCP Games' marketing chief Magnus Bergsson brings the total number of speakers at NGC 2006 to a commendable 70. **5** The Nordic Game press panel in a doom-laden session on the future of print media. **6** Joonmo Kwon, CEO of Korean MMO giant Nexon, outlines the company's strategy. **7** Christian Noer of Nordisk Film, the largest electronic entertainment distributor in the Nordic region. **8** This year's NGC Cocktail Lounge